

longest common subsequence

The **longest common subsequence (LCS)** problem is to find the longest subsequence common to all sequences in a set of sequences (often just two). (Note that a subsequence is different from a substring, for the terms of the former need not be consecutive terms of the original sequence.) It is a classic computer science problem, the basis of file comparison programs such as diff, and has applications in bioinformatics.

Given two string A and B print the Longest common subsequence length. All string are lower case alphabetic character.

Input:

The first line of the input contains an integer T ($1 \leq T \leq 50$) denoting the number of test cases. Each test case contains two space separated string A and B. ($0 \leq |A|, |B| \leq 1000$)

Output:

For each test case, display the case number (they are numbered sequentially starting with 1) and the LCS length.

Sample:

Input	Output
2	
city college	Case 1: 1
abadsfaf ajfkfjj	Case 2: 3